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DIALOG(R)File 351:Derwent WPI

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Oxidative dyeing composition for keratin fibers, especially human hair, comprising dye precursor(s), choline-based oxidase system and peroxidase, giving good dyeings without damaging fibers or skin
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Number of Countries: 021 Number of Patents: 003
Patent Family:

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DE 19847276	A1	20000420	DE 1047276	A	19981014	200029 B
WO 200021497	A1	20000420	WO 99EP7368	A	19991005	200029
AU 200022545	A	20000501	AU 200022545	A	19991005	200036

Priority Applications (No Type Date): DE 1047276 A 19981014
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200021497	A1	G		A61K-007/13	

Designated States (National): AU JP US
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

AU 200022545	A	A61K-007/13	Based on patent WO 200021497

Abstract (Basic): DE 19847276 A1

NOVELTY - A composition (A) for dyeing keratin fibers contains at least one dye precursor, an oxidase system based on choline and at least one peroxidase

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method for dyeing keratin fibers, involving application of (A), preferably after pre-incubation of the oxidase system for 30 minutes at 37degreesC.

USE - For dyeing keratin fibers (claimed), especially human hair but also e.g. furs, wool or feathers. Hair dyeing may be combined with other treatments, e.g. shampooing or application of active agents such as anti-dandruff agents, vitamins or aminoacids.

ADVANTAGE - (A) has a good dyeing performance (e.g. giving better intensity, gloss and fastness properties than prior art enzymatic dyeing systems), while simultaneously showing good fiber and skin protective and care properties (whereas chemical oxidant systems may damage the fibers and/or skin).

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Technology Focus:
TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Enzymes: Choline oxidase produced by Alcaligenes and Arthrobacter globiformis is added. The peroxidase is of vegetable or fungal origin, especially soybean peroxidase.
ORGANIC CHEMISTRY - Preferred Dye Components: The dye precursor consists of an oxidation dye precursor of the developer type (about 15 preferred examples of which are specified in the claims, e.g. p-phenylene diamine, p-aminophenol, 2,4,5,6-tetraaminophenol and 4,5-diamino-1-(2-hydroxyethyl)-pyrazole), optionally in combination with one or more of about 25 specific coupler components, e.g. 1-naphthol, resorcinol, 2-amino-3-hydroxypyridine or 3,4-methylenedioxyaniline. 9 Specific developer/coupler combinations are listed in the claims, e.g. 4-aminophenol/5-amino-2-methylphenol, 1-methyl-2-aminomethylphenol/5-amino-2-methylphenol and 4-hydroxy-2,5,6-triaminopyrimidine/2-methylresorcinol. Alternatively the dye precursors are 5,5-dihydroxyindole or -indoline derivatives of formula (I) or their acid addition salts.
Q, Q'=H or together form a bond;
R1=H, alkyl or hydroxyalkyl;
R2=H or COOH (optionally salified);
R3=H or alkyl;
R4, R5=H, alkyl or COR6;
R6=alkyl;
alkyl moieties have 1-4C.
Preferred Composition: (A) has pH 7-10, preferably 8.3. (A) further contains at least one surfactant, specifically a nonionic or amphoteric surfactant or a combination of at least one anionic surfactant with at least one amphoteric and/or nonionic surfactant.
Title Terms: OXIDATION; DYE; COMPOSITION; KERATIN; HUMAN; HAIR; COMPRISE;
DYE; PRECURSOR; CHOLINE; BASED; OXIDASE; SYSTEM; PEROXIDASE; DYE; DAMAGE;
SKIN
Derwent Class: B07; D16; D21; E19; E23; E24
International Patent Class (Main): A61K-007/13
International Patent Class (Additional): D06P-003/08
File Segment: CPI
Manual Codes (CPI/A-N): B04-L03A; B04-L03B; B06-A02; B06-D01; B06-D06; B07-D04; B07-D08; B07-D12; B10-B01A; B10-B03A; B10-E02; B10-H01; B14-R02; D05-A02; D08-B06; E06-A02E; E06-D01; E07-D04C; E07-D08; E10-B01A4; E10-B03A; E10-E02D5; E10-E02E2; E26-A03
Chemical Fragment Codes (M1):
38 M423 M431 M782 M905 P930 P943 Q252 Q262 Q321 RA00GC-K RA00GC-M
Chemical Fragment Codes (M2):

01 D011 D012 D013 D014 D023 D602 H181 H201 H401 H481 H541 H542 J011 J012 J013 J111 J211 J241 J242 L640 M210 M211 M212 M213 M214 M215 M216 M220 M221 M222 M223 M224 M225 M226 M231 M232 M233 M240 M262 M272 M273 M281 M282 M311 M312 M313 M314 M315 M316 M320 M321 M331 M332 M333 M340 M342 M383 M391 M412 M431 M511 M520 M530 M540 M782 M904 M905 P930 P943 Q252 Q262 Q317 Q321 0016-38101-K 0016-38101-M

Chemical Fragment Codes (M3):

01 D011 D012 D013 D014 D023 D602 H181 H201 H401 H481 H541 H542 J011 J012 J013 J111 J211 J241 J242 L640 M210 M211 M212 M213 M214 M215 M216 M220 M221 M222 M223 M224 M225 M226 M231 M232 M233 M240 M262 M272 M273 M281 M282 M311 M312 M313 M314 M315 M316 M320 M321 M331 M332 M333 M340 M342 M383 M391 M412 M431 M511 M520 M530 M540 M782 M904 M905 P930 P943 Q252 Q262 Q317 Q321 0016-38101-K 0016-38101-M

Derwent Registry Numbers: 0566-U; 0625-U; 0793-U; 0851-U; 1040-U; 1397-U

Specific Compound Numbers: R15428-K; R15428-M; R01040-K; R01040-M; R15427-K; R15427-M; R00625-K; R00625-M; R00793-K; R00793-M; R20655-K; R20655-M; R19987-K; R19987-M; RA12IT-K; RA12IT-M; RA0FI1-K; RA0FI1-M; RA1QDY-K; RA1QDY-M; R00566-K; R00566-M; R12931-K; R12931-M; R07413-K; R07413-M; RA157B-K; RA157B-M; R00851-K; R00851-M; RA0CAN-K; RA0CAN-M; R11649-K; R11649-M; R14801-K; R14801-M; RA1QE2-K; RA1QE2-M; R15426-K; R15426-M; RA12J0-K; RA12J0-M; RA1QE7-K; RA1QE7-M; RA0NNL-K; RA0NNL-M; RA0CAE-K; RA0CAE-M; RA0387-K; RA0387-M; RA1QE9-K; RA1QE9-M; RA09ZQ-K; RA09ZQ-M; RA1QEI-K; RA1QEI-M; RA1QEJ-K; RA1QEJ-M; RA1QEK-K; RA1QEK-M; RA01FW-K; RA01FW-M; RA09ZS-K; RA09ZS-M; RA1QEM-K; RA1QEM-M; RA0RU5-K; RA0RU5-M; R01397-K; R01397-M; RA00GC-K; RA00GC-M

Generic Compound Numbers: 0016-38101-K; 0016-38101-M; 0016-38102-K; 0016-38102-M

Key Word Indexing Terms:

01 133221-0-0-0-CL 5728-0-0-0-CL 188859-0-0-0-CL 10446-0-0-0-CL 5630-0-0-0-CL 134636-0-0-0-CL 70844-0-0-0-CL 251224-0-0-0-CL 220901-0-0-0-CL 283108-0-0-0-CL 11030-0-0-0-CL 61459-0-0-0-CL 130799-0-0-0-CL 14451-0-0-0-CL 803-0-0-0-CL 216672-0-0-0-CL 10113-0-0-0-CL 6693-0-0-0-CL 283111-0-0-0-CL 133220-0-0-0-CL 251243-0-0-0-CL 283112-0-0-0-CL 231578-0-0-0-CL 71813-0-0-0-CL 204609-0-0-0-CL 283113-0-0-0-CL 213583-0-0-0-CL 283122-0-0-0-CL 283123-0-0-0-CL 283124-0-0-0-CL 202144-0-0-0-CL 213585-0-0-0-CL 283126-0-0-0-CL 126913-0-0-0-CL 5913-0-0-0-CL 184598-0-0-0-CL 0016-38101-CL 0016-38102-CL